

AN EXPERIMENTAL STUDY OF THE EFFECT
OF PRIOR KNOWLEDGE ON
READING COMPREHENSION OF EFL STUDENTS

A THESIS
SUBMITTED TO THE FACULTY OF LETTERS
AND THE INSTITUTE OF ECONOMICS AND SOCIAL SCIENCES
OF BILKENT UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS
IN THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE

BY
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ABSTRACT

The use of prior knowledge while reading in the first language has been a primary focus for second language researchers and educators. It is claimed that if a learner can build a bridge between what he already knows about the world and what is presented in the passage comprehension will be achieved. According to Carrell and Eisterhold (1987), this use of prior knowledge has been formalized as "schema theory". Schema theory explains that a text does not carry meaning by itself, it only provides directions as to how readers should retrieve meaning from their prior knowledge. Many studies have been conducted on the effect of prior knowledge. However, almost all of these studies are carried out in ESL settings. This study aims at providing insight into EFL learners' use of their prior knowledge to comprehend information from a passage written in a foreign language.

The main question investigated in this study was whether activating EFL readers' prior knowledge by a pre-reading activity affects their recall of a text and whether this activation has an effect over a longer period of time. To acquire an answer to this question, 20 native Turkish subjects from Bilkent University in Ankara were chosen and divided into an experimental and a control group. Both groups took a pre-test which measured their prior knowledge about a topic.

Then, the experimental group subjects were provided with a pre reading activity. An Anticipation

the findings concluded that there was no relationship between EFL subjects' prior knowledge and their comprehension of a text. Therefore, activating prior knowledge did not significantly increase subjects' retelling of the text.

These conclusions contradict the findings of past studies on the effect of prior knowledge on reading comprehension. However, according to one of the latest studies on bilingual readers' use of background knowledge in learning from a text, Roller and Matambo (1992) found that bilingual readers used prior knowledge to improve comprehension of some passages, but not others. Characteristics of passages seemed to override the influence of prior knowledge. This selective use of prior knowledge has important implications for future research on prior knowledge and the EFL reader.

It is difficult to make generalizations with the findings of the current research because of its limitations. Nevertheless, the conclusions of the experiment should be of interest to EFL teachers, teacher trainers and curriculum developers.

Guide was used to activate subjects' prior knowledge; the subjects were asked to react to five statements selected from the reading passage by writing their opinions on the handouts. Then, they discussed what they thought and why they thought so as a class. On the other hand, control group subjects did not take any treatment which activated their prior knowledge. In order to control for the variable of time, they did another language activity which was not related to the reading passage. Then, both groups read the passage silently and immediately after they finished reading they were asked to tell orally everything they remembered about the passage. Each subject in both groups was interviewed by one experimenter and each experimenter wrote down everything the subjects told them. One week later, in order to investigate the effect of time, the same subjects were again asked to retell the same passage orally. Then, the subjects' retellings, both immediate and delayed, were analyzed by using a checklist which was prepared over the same passage. The reading passage was divided into idea units and the written protocols were assigned to these units. Each idea unit recalled was scored by giving one point.

The data were analyzed by running a t-test between the subjects retellings in the two groups. In addition, the Pearson Product Moment Correlation was used to measure the correlation between the subjects' prior knowledge and their retelling scores. However,

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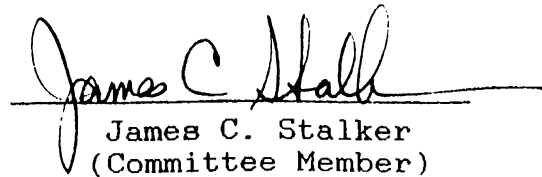
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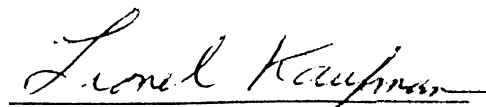
We certify that we have read this thesis and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts.



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CHAPTER I

INTRODUCTION

1.1 Background and Goals of the Study

One of the most universal findings gained from cognitive research is the importance of prior knowledge which a learner brings to a topic. Most contemporary definitions of comprehension describe the role of prior knowledge as the pathway to understanding new ideas. Classroom studies show that new ideas can have meaning only if they are related to something the individual already knows about the world. Most researchers agree that to develop efficient comprehension and to promote learning, teachers should start with what the students know (Anderson et al., 1977; Carrell & Eisterhold, 1987; Holmes & Roser, 1987; Readence et al., 1989).

According to research, the role of prior knowledge in language comprehension has been formalized as "schema theory". The schema theory of comprehension explains how, when people encounter new information, they attempt to understand it by fitting that new information into what they already know about the world. This previously acquired knowledge is called the individual's prior or background knowledge, and the previously acquired knowledge structures are called "schemata" (Carrell & Eisterhold, 1987).

During the past decade, ESL/EFL reading theory has come under the influence of the psycholinguistic model of reading. Many reading educators and researchers

agree that reading is not just the decoding of symbols, but an active, reconstructive process in which new information is assimilated with that already stored in the reader's mind (Carrell & Eisterhold, 1987). Thus, the prior knowledge the individual brings to the printed message is one of the most significant factors in facilitating comprehension.

People learn new things through reading. In the area of second language learning, it is recognized that reading is probably the most important skill for second language learners in academic contexts, because most of the knowledge students are expected to learn is found in textbooks. Since most of the EFL learners in Turkey aim at being successful in their professional fields, reading becomes an essential skill to be achieved. Most of the books are published in English throughout the world, so the students' aim is to complete their language study by acquiring the necessary skills to understand professional literature in their future life.

Since many researchers agree that schemata influence reading comprehension, second language teachers have focused on applying the principles of schema theory to their teaching methods in order to increase their students' reading proficiency. In order to activate students' prior knowledge about a given topic, teachers generally start with what the students already know about the topic. Sometimes they talk

about students' experiences and interests (Davis, 1990), show them pictures or videos about the topic (Taglieber et al., 1988) or make them predict the content of the text (Grabe, 1991; Smith, 1978).

This study will focus on the effects of activating EFL students' prior knowledge through pre-reading activities on their retelling of the text. Langer (1982) says that both teachers and students benefit from pre-reading activities. Pre-reading activities provide the elaboration of prior knowledge, awareness of what is known about a topic, and expectations about content and language to be presented in a text which all lead to more efficient processing and recall of the text. Many studies have been conducted on the importance of prior knowledge and the effects of activating this prior knowledge within the reading process. Most of these studies have been carried out with native speakers of English or nonnative speakers of English in ESL settings, so the aim of this study is to demonstrate the truth of these findings with EFL learners in Turkey.

1.2 Statement of Research Question and Discussion

The research questions answered in this study were:

1- Will EFL students recall significantly more information if they are provided with a pre-reading activity, namely an Anticipation Guide, which is

designed to activate students' prior knowledge about the topic and also provide a purpose for reading, than if prior knowledge is not activated?

2- Will EFL students recall significantly more information after a period of one week if they are provided with a pre-reading activity, which will activate their prior knowledge, than if prior knowledge is not activated?

Previous research provides support for the view that activating students' prior knowledge, before reading a text facilitates comprehension and recall of that text. As Thompson (1987) says; "The greater the familiarity with the content area of a text, the greater comprehension and recall of that text" (p. 50).

Reading comprehension is considered to be a complex process, which involves the interaction between the reader and the author via the text. According to Carrell & Eisterhold (1987) readers activate schema when they try to give a text a consistent interpretation. If they are successful in doing so, it can be said that they comprehend the text, because much of the meaning understood from a text is not in the text but in the prior knowledge of the reader.

Research in native and nonnative reading comprehension has shown that the ability to understand texts is based not only on an individual's linguistic knowledge, but also on general knowledge of the world. Most teachers would agree that, sometimes, although the

students know every word in a paragraph, they cannot understand what the paragraph means. According to Thompson (1987), three major factors are involved in comprehending and storing the new information, contained in a text;

1. ability to use background knowledge about the content area of the text,
2. ability to recognize the rhetorical structure of the text; and
3. ability to use efficient reading strategies. (p. 50)

The importance of pre-reading activities may be explained by schema theory. According to this theory, meaning is constructed through interaction between the reader's prior knowledge and the text. If the reader does not have appropriate knowledge or cannot activate that knowledge, comprehension cannot be achieved. Pre-reading activities are intended to activate appropriate prior knowledge or provide knowledge that the reader lacks.

One of the pre-reading activities that is suggested by Tierney et al. (1990) is the Anticipation Guide. By using this technique, teachers can motivate students and enhance their comprehension by having them react to several statements about a reading passage before they begin reading. Therefore, teachers can determine how much prior knowledge their students have about the topic.

In the literature of second language learning, two kinds of schemata that explain the role of prior

knowledge in reading comprehension have been identified;

- 1- Formal schemata: Background knowledge of the formal, rhetorical organizational structures of different types of texts, and
 - 2- Content schemata: Background knowledge of the content area of a text.
- (Carrell & Eisterhold, 1987, p. 223)

Carrell (1987) says that in testing for the effects of content schemata, one keeps the formal rhetorical structure of the text constant and manipulates the content, and has comparable groups of subjects process each different content. Any differences on the dependent measures (answers to questions, written or oral recall protocols, summaries, etc.) are the results of content and readers' background knowledge of that content.

In this study formal schemata was not focused on. Then, as Carrell (1987) described, "the formal, rhetorical structures of the text" were kept constant. Therefore, the differences on the dependent measure, which were oral recall protocols, immediate and delayed, were presumed to be due to the activation of readers' background knowledge of that content.

1.3 Statement of the Hypotheses

There were two experimental hypotheses tested in this study:

- 1- There will be a significant difference in the recall of a text by readers whose prior knowledge has been

activated by an Anticipation Guide over readers whose prior knowledge has not been activated.

2- There will be a significant difference in the recall of a text after a period of one week by readers whose prior knowledge has been activated by an Anticipation Guide over readers whose prior knowledge has not been activated.

The **null hypotheses** of the study were:

1- There will not be a significant difference in the recall of a text by readers whose prior knowledge has been activated by an Anticipation Guide over readers whose prior knowledge has not been activated.

2- There will not be a significant difference in the recall of a text after a period of one week by readers whose prior knowledge has been activated by an Anticipation Guide over readers whose prior knowledge has not been activated.

1.4 Variables of the Problem

Dependent Variable: Oral recall of the reading material.

Independent Variable: Activation of prior knowledge of the readers through an Anticipation Guide.

Moderator Variable: Interval of time between recall and reading of text, immediate and one week later.

Control Variable: Amount of prior knowledge.

1.5 Definitions

Prior Knowledge: The individual's knowledge about the world stored in memory that he makes use of to understand information. Readence et al. (1989) state that "richness of prior knowledge determines the extent to which a given text can be comprehended by a given individual" (p. 17).

This knowledge, coupled with the ability to make linguistic predictions, determines the expectations the reader will develop as he reads. Skill in reading depends on the efficient interaction between linguistic knowledge and knowledge of the world. (Carrell & Eisterhold, 1987, p. 220)

Schema: The interrelated network of knowledge structures in memory is called "schema", the plural of which is "schemata". Comprehending a text is an active process because readers relate the information in the reading material to his own knowledge structures. As Carrell and Eisterhold (1987) say; "every input is mapped against some existing schema and this schema must be compatible with the information that was gained from the text. Then, efficient comprehension can be achieved" (p. 218).

Recall: Information remembered about a text after reading the text. There are two ways of measuring recall, oral retelling and written retelling. In oral retelling students are asked to tell orally everything they remember about a passage they read. They might be interviewed by the teacher(s) or their retellings might be recorded and analyzed later. In written retelling

students write down everything they remember about the passage. In this study, the oral retelling method was used to measure students' comprehension.

Pre-Reading Activities: Activities that are used before students read a text. These activities are used to:

1. activate or develop prior knowledge
 2. activate or provide knowledge of text structure,
 3. introduce key vocabulary, and
 4. establish a purpose for reading.
- (Moorman & Blanton, 1990, p. 176)

Anticipation Guide: A type of pre-reading activity used to activate prior knowledge about a topic before reading and provide purpose by serving as a guide for reading. In this activity, students are given handouts which consist of the key concepts to be learned in the text. Then, they are asked to write their opinions about each statement before reading the text. After reading the passage, the students discuss whether their own ideas have changed or not, depending on the information given in the text (for a complete description see Tierney et al., 1990).

1.6 Statement of Limitations

EFL learners in Turkey need to read books in their professional fields. Therefore, reading is not just a skill on which the students are tested for comprehension; rather it is a skill which the students must achieve in order to acquire new information and become independent learners. This study is limited to

a Turkish context and to teaching of a specific skill, reading; therefore, it is difficult to generalize many of the conclusions to other language skills and all the EFL learners in other countries. However, the results of the study may still be applicable to the teaching of other foreign languages and to EFL teachers and students and English language teaching in general.

1.7 Statement of Expectations

Although this research has some limitations, it has aimed to determine the importance of prior knowledge in the reading comprehension of foreign language learners. It was assumed that activating students prior knowledge about a topic and giving them a purpose for reading would increase their recall of the text. If pre-reading activities have an effect on EFL students' recall, it can be assumed that these types of activities facilitate students' reading comprehension. It then would suggest that teachers should use pre-reading activities in their reading lessons rather than just teach vocabulary to prepare their students to read.

1.8 Overview of Methodology

The main question investigated in this study was whether activating the prior knowledge of the EFL students would increase the amount of information recalled in a text. To get an answer to the question,

20 native Turkish students from two intermediate classes in Bilkent University School of English Language (BUSEL) were chosen as the subjects of the study.

The subjects were given a pre-test to measure their prior knowledge about a particular topic several weeks before they read the text. Based on their pre-test scores, the students were matched in the two classes, resulting in one control and one experimental group. The students in the experimental group were provided with a pre-reading activity, the Anticipation Guide. Then, the students in both groups read the same text silently in a given time period. After reading the passage, the students were asked to tell orally everything they remembered about the text. One week later, the students were asked to retell the same text in the same way.

1.9 Overview of Analysis

The pre-test was analyzed by giving each word association a score of 0 to 3 in order to assign students to control and experimental groups.

The reading material was divided into units, as Clark (1982) suggests; "Where good readers would normally pause in oral reading" (p. 434). Each unit was assigned a score of 1. For the purposes of the study the importance value of units recalled was not analyzed. Only the amount of the information recalled

from students' oral retellings was analyzed.

The subjects' scores of both the immediate and delayed retellings in the experimental group and in the control group were compared in order to determine whether the differences in results were statistically significant.

1.10 Organization of the Thesis

The second chapter is a review of the related professional literature on the importance of prior knowledge in comprehension in general and in reading, the importance of pre-reading activities and the use of retelling as a measure of comprehension.

Methodology used for collecting and analyzing the data is explained in the third chapter.

The fourth chapter includes the results of the analysis of the data.

Conclusions drawn from the study, implications and suggestions for further research are discussed in the fifth chapter.

CHAPTER II

REVIEW OF LITERATURE

2.1 Importance of Prior Knowledge in Comprehension

As Anderson et al. (1977) say, "Every act of comprehension involves one's knowledge of the world as well" (p. 369).

Immanuel Kant (1963) claimed that new information, new concepts, new ideas can have meaning only if they are related to something the individual already knows. Kant's opinion has been applied to second or foreign language comprehension as well as to comprehension in one's native language.

According to Carrell & Eisterhold (1987), the role of prior knowledge in language comprehension has been formalized as "schema theory". Schema theory explains that any text, either spoken or written, does not by itself carry meaning. Rather, according to schema theory, a text only provides directions for listeners or readers as to how they should retrieve or construct meaning from their own, previously acquired knowledge. These previously acquired knowledge structures are called "schemata".

Researchers who have investigated the relationship between prior knowledge and comprehension have suggested that prior knowledge is important for understanding, remembering and interpreting new information.

Readence et al. (1989) regard a person's schema as

the "central guidance system" in the comprehension process. An individual searches existing schemata to make sense of incoming information, and the degree to which this incoming information is consistent with the expectation generated from existing schemata determines the presence or absence of comprehension.

Hudson (1982) points out that research by cognitive psycholinguists into the influences of schemata on L1 reading comprehension provide two important insights into the non-visual information processing problems the L2 reader may confront.

First, the research provides insight into the effects of extratextual background knowledge on processing. Second, it indicates how during the process of "schemata" reconciliation, the process of fitting new input to existing knowledge structures, good reader strategies may cause a breakdown in comprehension. (p. 185)

According to Holmes and Roser (1987), prior knowledge has an important effect on comprehension and learning. They believe that finding out what students already know aids teachers in developing lessons and what students already know can be used to build new concepts and eliminate wasting time by reteaching ideas with which students are already familiar.

2.2 Importance of Prior Knowledge in Reading

Comprehension

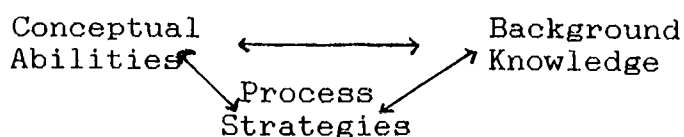
Schema theory research has shown the importance of background knowledge during the reading process which

has been influenced by research in psycholinguistics and has been described by Goodman (1967) as the psycholinguistic model of reading.

According to Goodman, reading is a "psycholinguistic guessing game" in which the "reader reconstructs a message which has been encoded by a writer as a graphic display" (p. 126). In his model, a good reader need not use all the textual clues in order to understand the meaning of a text; he makes predictions, tests those predictions and confirms or revises them. "The better the reader is able to make correct predictions, the less confirming via the text is necessary" (Goodman, 1967, p. 126).

Coady (1979) has suggested a model in which the EFL/ESL readers' background knowledge interacts with conceptual abilities and process strategies to produce comprehension (see Figure 1).

FIGURE 1
Coady's 1979 Model of the ESL Reader



By **conceptual abilities**, Coady means general intellectual capacity. **Process strategies** mean various subcomponents of reading ability, which also apply to oral language. According to Coady's psycholinguistic model of reading:

the fluent reader approaches a text with expectancies based upon his knowledge of the

subject [Background knowledge]. As he progresses into the material, he confirms or revises these expectations and builds still more on the basis of what has been read so far [Conceptual strategies]. This confirming of expectancy is done through the extraction of minimal samples from the page [Process strategies]. (p. 6)

Background knowledge is an important variable for Coady because "students with a Western background of some kind learn English faster, on the average, than those without such a background" (p. 6).

Melendez and Pritchard (1985) agree with Coady that to activate appropriate schemata, the students should be alert for anything that can give them clues to content. This gets them ready to read and test their hypotheses. So, the existence of a schema related to a topic can enhance one's understanding of it and the lack of a relevant schema will inhibit comprehension.

In Smith's (1987) opinion prior knowledge makes reading more interesting, easier to visualize, and therefore easier to understand. By linking the old and the new, there is a structure on which to connect the new ideas.

Before and while reading, good readers ask "What do I already know about this topic?" and "How does this new information relate to my previous knowledge?". Although textbook topics may at times seem totally unfamiliar, seldom are all of the ideas completely new. Usually there is a link, an old bit of knowledge that you can associate with the new ideas. (Smith, 1978, p. 43)

In an experimental study conducted with 72 advanced ESL students at the university level, Johnson (1982) investigated the effects of building background knowledge on reading comprehension. Subjects read a passage on the topic

of Halloween, which contained familiar and unfamiliar information based on the subjects' experience of this custom. Subjects studied the meanings of preselected unfamiliar vocabulary before reading or found them while reading in the text. Statistical analysis of the recall of the passage and of the sentence recognition task indicated that prior cultural experience prepared readers for comprehension of the familiar information about Halloween in the passage. However, explanation of the target vocabulary did not have a significant effect on reading comprehension.

Researchers, who have focused on EFL environments, agree with the findings from the native or second language research and conclude that EFL readers' comprehension depends on their schemata. As Grabe (1991) states, most of our current views of second language reading are shaped by research on first language readers. First language reading research has made impressive progress in learning about the reading process. It has been concluded that if these readers are faced with highly unfamiliar content, particularly materials with many culturally loaded concepts, comprehension will be difficult, because of the reader's lack of appropriate knowledge.

However, Grabe argues that since research findings show some differences between first and second language reading, findings from research with first language students cannot always be applied directly to L2 contexts because ESL students are distinct from L1 students (and from each other); research on second language students is essential.

So, as determined in Grabe's article, a primary goal for ESL reading theory and instruction is to understand what fluent L1 readers do, and decide how best to move ESL students in that developmental direction. He describes fluent reading as "rapid, purposeful, interactive, comprehending, flexible and gradually developing" (1991, p. 378). When reading is interactive, the reader makes use of information from the background knowledge he possesses and information from the printed page.

Grabe (1991) has also concluded that background knowledge (content schemata) has a major influence on reading comprehension. A large body of literature has argued that prior knowledge of text related information strongly affects reading comprehension. Similarly, cultural knowledge has been shown to influence comprehension. In both L1 and L2 contexts, formal knowledge and content knowledge play important roles in reading comprehension. So, it can be concluded from these research findings that texts with familiar content are easier to read and comprehend than texts on content from a distant, unfamiliar cultural heritage.

In their article, Taglieber et al. (1988) say that students of English as a foreign language experience considerable difficulty in comprehending English texts when reading them for the first time. Not only do these texts usually contain unfamiliar vocabulary, but they also contain unfamiliar concepts and cultural information that make them difficult. A study conducted by Steffensen et al. (1979) is

a good example proving the effects of cultural background knowledge on reading comprehension. In their study two groups of subjects with different cultural heritages were investigated: a group of Asian Indians living in the U.S. and a group of Americans. Each subject was asked to read and recall two personal letters. Although they were constructed with similar rhetorical organization, the cultural contents of the letters differed, one described a traditional Indian wedding, the other a traditional American wedding. As predicted, cultural content schemata influenced reading comprehension; both of the groups read the material dealing with their own culture faster and recalled more of the content.

In their study with Egyptians, Nelson and Schmid (1989) found that if the students read a passage about a subject with which they are familiar, they will comprehend more than when reading about an unfamiliar subject. Their research also suggests that students not only are comprehending more by reading passages about their native culture (passages for which they have a schema), but they are learning effective reading skills that will transfer to reading passages on cultures other than their own.

In her article, McKay (1987) mentions two kinds of problems that cultural information can present:

1. The cultural assumptions in a text may present a conflict with the students' existing set of values and beliefs.
2. The cultural information that is presented in a text may or may not present an accurate view of the culture. Students might conclude that the scene described in the reading is typical or

representative of life in the country, while in fact it may or may not be. (p. 18)

To prevent these potential problems, she suggests that teachers do two things:

1. In selecting a text, the teacher needs to determine what cultural background information is contained in the text and to what extent the cultural assumptions in the text differ from those of the students.
2. The teacher needs to determine to what extent the cultural information is representative of the society being described. (p. 18)

To conclude, it can be said that the prior knowledge a learner brings to the passage has a very important role in his understanding of the passage. In order to comprehend what is written in a reading passage, he should activate his prior knowledge about the topic and build a bridge between the old and the new; then, learning takes place.

2.3 Importance of Pre-reading Activities

Findings gained from previous research help us to conclude that reading comprehension entails more than knowledge of vocabulary and syntax. If, as concluded, students' prior knowledge about a topic constitutes one of the most important cognitive factors, it is the teachers' duty to identify students' prior knowledge and help them activate this knowledge to understand the meaning of the material. The activities that teachers provide to prepare their students to read text material should contribute to their reading comprehension.

As Langer (1982) mentions, teachers sometimes feel that students lack relevant prior knowledge and the ideas in

textbooks are far from their students' experiences; so the language and the ideas in the text and the prior knowledge and the language of the students have created major instructional problems for the teachers and major learning problems for the students. Langer believes that students can have more prior knowledge about a topic than the teachers expect. Therefore, if teachers start with what students know, the texts will be easier to understand for the students. As she points out, if the students' prior knowledge can be activated, they will understand the text better and recall more information from the text. Langer believes that "how one encourages students to use links between their knowledge of the topic and the text's topical content makes the difference" (p. 149).

The main goal of reading is that students should be able, by themselves, to acquire subject matter knowledge from reading, integrate that knowledge with earlier knowledge, and apply it in their lives. To achieve this goal, research in the field suggests that teachers use pre-reading activities which prepare students for the remainder of the lesson.

Papalia (1987) agrees with the others and says that pre-reading activities should be selected according to the experience and interests of students. Expectations in reading are embedded in situations and settings. During the pre-reading segment students should be introduced to situations that generate expectations while reading. They advise a pre-reading activity which asks students to develop

questions associated with the title of the reading passage. In their opinion, students approach a text with certain schemata in mind and with questions of their own to which they would like to find answers.

To show the effects of pre-reading activities, Stevens (1982) provided a group of students in social studies with background information on the Texas War. Another group received a pre-reading lesson on the unrelated U.S. Civil War. When both groups read a text on the battle of Alamo, students with prior knowledge about the Texas War answered significantly more comprehension questions correctly than the others in the uninformed group.

As Moorman and Blanton (1990) explain, more meaningful learning from a text occurs when the reader is engaged in the cognitive activities of activating and focusing. In the activating process the reader calls up and organizes prior knowledge related to the topic. The second cognitive process, focusing, involves developing a purpose for reading. In their opinion, this second process is also crucial because in this process the readers have a sense of the relevance of information presented in the text and are able to ignore irrelevant information. This process also aids the reader in coordinating the reading material with relevant reading strategies throughout the assignment. According to Moorman and Blanton (1990) pre-reading activities have four goals:

1. to activate or develop prior knowledge
2. to activate or provide knowledge of text structure,

3. to introduce key vocabulary, and
4. to establish a purpose for reading. (p. 176)

As they mention, the first and most important goal of the pre-reading activities is to activate or develop students' background knowledge relevant to the topic. In the pre-reading phase, the teacher begins to build a bridge between what students already know and what they are expected to learn. Activities are used to help students to recognize what they already know about the topic and how what they know relates to what they will be reading.

As mentioned, another goal of the pre-reading activities is to present students with a clear and conscious purpose for reading the assignment. Students must always have a purpose for reading, because a purpose guides students in "directing" and "monitoring" their reading. Moorman and Blanton (1990) suggest that teacher assign a purpose for reading, because some students may not have a purpose or they may develop different purposes for themselves, and this situation results in every student wanting a different discussion about the text. As they summarize: "Ideally the best strategy for a lesson is to activate background, develop a good purpose, and let students read" (p. 177).

Davis (1990) developed the "Thematic Experience Approach", which helps to activate students' prior knowledge and share what they know about a topic with their classmates. The Thematic Experience Approach uses experiences to interest students and to build their

background knowledge in an environment that promotes risk taking. By using this approach, students can have successful learning experiences, positive relationships with their teachers and the teachers can create a link between experience and language in a "nonthreatening environment".

Selekman and Cleinman (1978) indicate that learner participation in a pre-reading communicative interaction activity can facilitate learner comprehension of reading material. While talking about their experiences, students activate their schemata and learn about the others' opinions which help them to comprehend and recall the text better.

According to Langer (1982), both teachers and students benefit from pre-reading activities. Teachers become aware of:

1. the levels of concept sophistication possessed by the individuals in the group;
2. the language the students have available to express their knowledge about the topic; and
3. the amount of concept instruction necessary before textbook reading can be assigned. (p.154)

Students are given the opportunity to:

1. elaborate relevant prior knowledge
2. become more aware of their own related knowledge; and
3. anticipate concepts to be presented in the text. (p. 154)

According to research findings, one type of pre-reading activity, prediction, helps students activate their prior knowledge and serves as a guide for processing information while reading. Research also suggests that discussion of predictions after reading helps students see how new information affects what they knew.

Grabe (1991) has concluded from previous research that prediction of the text plays an important role in comprehending the text. According to him, prediction helps students anticipate later text development. It allows students to evaluate the previous information, understand the author's intentions better and decide whether or not the information is useful.

Smith (1987) states that both consciously and subconsciously the good reader is "predicting, visualizing and drawing comparisons" in order to assimilate new information. He presents a list of "thinking strategies" that good readers employ while reading:

1. Make predictions (develop hypotheses)
2. Describe the picture you are forming in your head from the information (develop images during reading)
3. Share an analogy (link prior knowledge with new information in text)
4. Verbalize a confusing point (monitor your ongoing comprehension)
5. Demonstrate fix-up strategies (correct your lagging comprehension). (pp. 43-44)

In the study conducted by Taglieber et al. (1988), the effects of three pre-reading activities, pictorial context, vocabulary pre-teaching, and pre-questioning, were investigated with 40 undergraduate Brazilian EFL students. It was found that all three pre-reading activities produced significantly higher scores in the experimental group than in the control group. Vocabulary pre-teaching resulted in increased comprehension compared with the control group but was significantly less effective than the other two strategies.

The variable of vocabulary knowledge or difficulty is a variable most likely to influence the reader's comprehension on the word and sentence level. However, the effects of vocabulary difficulty on reading comprehension are not as clear as the effects of prior knowledge. (Johnson, 1982, p. 513)

Thompson (1987) agrees with the findings of the previous research and says that pre-questions which direct attention to the main ideas in the text facilitate recall not only of these ideas but also of other information. On the other hand, pre-questions about details also facilitate recall as compared to absence of pre-questions.

The Anticipation Guide is another technique for activating prior knowledge. As Tierney et al. (1990) point out, the Anticipation Guide is a pre-reading activity which aims to enhance students' comprehension by having them react to a series of statements about a topic before they begin reading. Students also become motivated to read to resolve the conceptual conflict. As they believe, by using this technique, "misconceptions about a topic can be brought out and inaccuracies dealt with" (p. 46). They also advise using the Anticipation Guide as a post reading activity. As the previous research findings have concluded, prior knowledge about the topic to be learned is very important for comprehension of the text. Then it is the reading teachers' duty to activate and enhance that knowledge by pre-reading activities, rather than just presenting them the meanings of the new words. Pre-reading activities can be used in several ways; students can discuss their

experiences, feelings or opinions, they can prepare questions according to the topic or the first sentence of the reading passage or answer the questions which are prepared by the teacher. In addition, teachers can show pictures or movies in the classroom and then have discussions which will help students to comprehend the reading passage better.

2.4 Value of Retelling as a Measure of Comprehension

Schema theorists have studied the relation of background knowledge to text comprehension through recalling as well as answering questions about the text. The findings conclude that activating or building readers' prior knowledge before reading improves reading comprehension whether students are asked to answer post-reading questions or retell information of the text.

As Young and Bastianelli (1990) describe, in retelling students narrate everything they remember, instead of answering traditional post-reading questions. During this process, the teacher determines how much information is retold. If the students retell an insufficient amount, the teacher probes with open-ended questions, and their responses permit the teacher to see how their prior knowledge and experience affect their comprehension of the text.

In Johnson's (1982) study, the effects of prior knowledge or prior experience on recall is proven one more time. In the study, after the subjects read the passage,

they were asked to recall the story in written form without reference to the text and to recognize sentences which contain true information from the text. If the students' sentences in written recall contained correct information, they were counted. Results showed that prior experience in American culture had effects on ESL students' comprehension of the passage on the topic of an American custom, Halloween. In this study, the written retelling measure was a useful way to show how readers related their past personal experiences to comprehend a passage.

A study conducted by Crafton (1983) involved a group of students who read a text on sociobiology followed by a second passage on the same topic. Another group read a passage unrelated to sociobiology followed by the target sociobiology text. The findings showed that the students who developed prior knowledge of the topic produced greater recall of the text than the other group. In this study, retelling was again found to be a useful way to measure whether comprehension took place or not.

In her study Carrell (1987) investigated the effects on ESL reading comprehension of both culture-specific content schemata and any potential interaction between them. In the study, students of Muslim and Catholic background read, recalled and answered questions about each of two texts. The students in both groups were asked to read the text and try to understand it without memorizing the passage. Within each group, one half of the subjects read the texts in a familiar, well organized rhetorical format and the other

half read the texts in an unfamiliar, altered rhetorical format. Later, they were told to write down as much as they could remember from the text, using complete sentences. Recall protocols were analyzed according to the "quantity" and "quality" of the idea units recalled. "Elaborations" (culturally appropriate additional knowledge), "distortions" (culturally inappropriate modifications) and other errors were also scored. Results showed that

the conditions expected to yield good reading comprehension (familiar content, familiar rhetorical form) did so. Similarly, the conditions expected to yield poor reading comprehension (unfamiliar content, unfamiliar rhetorical form) did so. The results for the mixed conditions (familiar content, unfamiliar rhetorical form; unfamiliar content, familiar rhetorical form) indicated that content schemata affected reading comprehension to a greater extent than formal schemata. (p. 461)

As can be seen in Carrell's study, using the retelling procedure is a useful way to determine how a reader's recall is influenced by the structure of a text.

As it is seen from these research studies using retelling is a useful way to measure comprehension of a reading passage. Since retelling is a direct way of measuring comprehension, teachers can understand how much information is understood and how successful their students are in connecting their prior knowledge with the information contained in the passage. Since every reader will remember something about the passage they have read, retelling indicates not only how much they read but how they organize what they recall and how they make use of their prior knowledge.

CHAPTER III

METHODOLOGY

3.1 Introduction

During the past decade most EFL/ESL reading educators and researchers have agreed that the reading process involves more than understanding the meaning of each word in the reading material. They have been influenced by schema theory which explains the role of prior knowledge in comprehension. According to schema theory, people comprehend information if they can relate that information to what they already know about the world. Research findings have shown that explaining the target vocabulary does not help students in understanding the reading material as much as activating their prior knowledge about the topic. (Johnson, 1982; Taglieber et al., 1988) However, in foreign language classes teachers generally explain unknown words in reading lessons, rather than discuss what the students know about the topic. Thus, the purpose of this study is to examine whether activating what EFL subjects already know about the topic of a reading passage will increase the amount of information recalled in the text.

3.2 Participants

3.2.1 Subjects

The study was conducted in the Bilkent University School of English Language (BUSEL) in Ankara, Turkey.

Twenty native Turkish students from two intermediate classes that were chosen randomly participated in the study. The subjects were selected after being given a pre-test which measured their prior knowledge about the topic of the reading passage (see section 3.4.1 for the procedure).

The study was conducted in the subjects' classrooms at their usual hours and with their own teachers in order to control for stress. The subjects were told that they were going to participate in a study but they were not informed about the nature of the study.

3.2.2 Experimenters

The retelling procedure was conducted by the researcher and other volunteer Turkish teachers of English, nine for the immediate retelling and three for the delayed retelling. Fewer experimenters were needed for the delayed retelling because of fewer subjects due to absence.

Teachers were given a training session before interviewing the subjects. In this training session they were told that the students could retell the text either in English or in Turkish. Recall of ideas was more important than recall of English. Each teacher was told to start interviewing by asking questions which were not related to the passage, such as "What is your name?, etc.," to reduce stress. They were asked

to tell the students to recall everything they remembered about the passage and to write down everything the students told them. They were also told not to interrupt the students while they were retelling but prompt them when they finished by asking "What else do you remember from the passage?".

3.3 Materials

3.3.1 Adapted Reading Passage

Materials included an adaptation of a reading passage titled "Gypsies and Other Nomads" from the textbook In Context (Zukowsky/Faust et al., 1982). Since the reading material was too long to read and retell within the time period allotted for the experiment, it was shortened and simplified by the researcher taking into consideration the proficiency level of the students (see Appendix A).

3.3.2 Retelling Checklist

A checklist listing the 110 important idea units of the reading passage was prepared for the retelling procedure (see Appendix B). This checklist was prepared by taking Clark's (1982) suggestion into account, that is, the passage was divided into units "where good readers would normally pause in oral reading" (p. 434). The words which did not contain information, such as "however", "still", "but", "yet", etc., were not required to be recalled by subjects.

Both the shortened and simplified reading passage and the checklist were read and edited by a native speaker of English. Then, the students' retellings were transformed into the idea units in order to assign them a score. Paraphrases of the units were accepted, but distortions were not accepted during the scoring procedures.

3.4 Procedures

3.4.1 Group Assignment

In order to assign the subjects to the control and experimental groups, the subjects were given a pre-test several weeks before they read the text. The Word Association technique developed by Langer (1982) was used in order to measure the subjects' prior knowledge about the topic (see section 3.5.1 for the analysis procedure). The subjects were given a piece of paper and told to write whatever they could think of when they saw the topic "Nomads". The subjects were then assigned to two groups by matching the scores they got from the pre-test. Therefore, both experimental and control groups had subjects with the same range of Word Association scores and approximately the same means.

Table 3.1 shows the Word Association scores of the experimental and control group subjects. As can be seen from the table, the mean scores were found to be 15.8 for the experimental group and 15.4 for the

control group, and the standard deviations were found to be 7.05 for the experimental group and 7.78 for the control group which shows that the two groups were approximately equal in terms of the subjects' prior knowledge about the topic.

Table 3.1
Word Association Scores of Experimental and Control
Groups (Matched Subjects)

Subject	Experimental	Control
1	4	4
2	9	6
3	10	9
4	12	10
5	16	16
6	17	18
7	18	18
8	22	23
9	25	25
10	25	25
TOTALS	158	154
MEANS	15.8	15.4
SD	7.05	7.78

3.4.2 Experimental Treatment

The subjects in the experimental group were provided with a pre-reading activity, namely, the Anticipation Guide. (Tierney et al., 1985) The following steps were followed in the Anticipation Guide technique:

1- Identifying major concepts: The ideas to be learned by reading the passage were identified by the researcher as follows:

a- There was a time when most people lived in

groups that moved around as the seasons changed.

b- Nowadays there are still a few groups of people who do not have permanent homes.

c- Farm workers move because they work harvesting crops.

d- Gypsies who have adopted to modern society are found in many parts of the world.

e- Nomads are herders who move their animals to places where there is plenty of grass.

f- There are traders who move around in order to buy and sell their goods.

2- Creating Statements: By taking into consideration the assumption of students' knowledge to understand what the statements meant, five statements were created from the major concepts by the researcher. They were:

a- Today, people's lives are determined by the seasons.

b- Farm workers no longer move around as the seasons change.

c- Gypsies have adapted to living in a modern world.

d- Nomads are herders who travel from place to place with their animals.

e- There are traders who still move around in order to buy and sell their goods.

3- Presenting Guide: The five statements developed in step 2 were presented to the subjects by their teacher with the following directions;

"Below are five statements about nomads. Read each statement carefully and write your opinion about each one as "I agree", "I do not agree" or "I have no idea". Be prepared to defend your opinion as we discuss the statements". (see Appendix C.)

4- Discussion of Each Statement: Each statement was discussed briefly in the classroom with the teacher, including at least one opinion on each side of the issue.

5- Directing Students to Read the Text: Students were told by their teacher to read the text silently with the purpose of deciding what the author said about each statement. They were given fifteen minutes.

3.4.3 Control Treatment

In the control group, the pre-reading activity was not used, but in order to control for the variable of time, these subjects were provided with a different language activity which was not related to the reading passage and which took fifteen minutes. Fifteen minutes later they were also given the same reading passage and told to read it silently in fifteen minutes.

3.4.4 Data Collection

After reading the passage, each subject was interviewed by one experimenter and asked to tell everything orally that they remembered about the text

they had just read. The subjects were told that they were free to retell the passage either in English or in Turkish. Everything the subjects said was written down by the experimenters to be analyzed later.

After a one week interval, the subjects were asked to retell the same text. The same procedure was used to collect data for the delayed retelling.

3.5 Analytical Procedures

3.5.1 Word Association

The pre-test was analyzed by giving each word association a score of 0 to 3. If the word the subjects associated with the title was related to the title and found in the passage it was assigned a score of three. If the word was related to the title and not found in the passage but related to something else in the passage, it was assigned a score of two. If the word was related to the title but not found in the passage and not related to anything else in the passage, it was assigned a score of one. If the word the subjects associated with the title was not related to the title at all, it was assigned a score of zero. The results of the pre-test were used to assign the students to the control and experimental groups. In addition, the Pearson Product Moment Correlation was used to find out whether there was a correlation between students' prior knowledge (Word Association scores) and their retelling scores.

3.5.2 Retelling

In order to analyze the retellings of the subjects, the reading material was divided into 110 units and each unit was assigned a score of one. Each subjects' retelling was given a score based on the number of units recalled.

The amount of the information recalled from both the immediate and delayed (one-week later) retelling of the two groups were compared by using a t-test in order to determine whether the differences in results were statistically significant.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

The purpose of the study was to examine the effects of activating EFL subjects' prior knowledge through a pre-reading activity, the Anticipation Guide, on their retelling of the text.

Cognitive research findings have led to the conclusion that the prior knowledge a learner has before reading a passage has great importance in his understanding new ideas. This research has been done in the learners' native language. As concluded from the previous research findings, mostly conducted on ESL settings, if a learner can build a bridge between what he already knows and what is presented to him, that is, if he can attach the new to the old, he will easily comprehend the information given in a reading passage and retrieve it when necessary. Therefore, learning will be accomplished (Anderson et al., 1977; Carrell & Eisterhold, 1987; Grabe, 1991; Readence et al., 1989). Taking these findings into consideration, it was hypothesized in the present study that;

1- There will be a significant difference in the immediate recall of a text by readers whose prior knowledge has been activated by an Anticipation Guide over readers whose prior knowledge has not been activated.

2- There will be a significant difference in the delayed recall of a text by readers whose prior knowledge has been activated by an Anticipation Guide over readers whose prior knowledge has not been activated.

To test these hypotheses, 20 native Turkish students from two intermediate classes participated as the subjects of the study. Firstly, they were given a pre-test, which was the Word Association technique, to measure their prior knowledge about a particular topic several weeks before they read the text. According to their pre-test scores, the subjects were matched and placed in two groups, one experimental and the other control.

The experimental group subjects were provided with a pre-reading activity, an Anticipation Guide, which was designed to activate their prior knowledge about the topic whereas the control group subjects did not receive any treatment which activated their prior knowledge. As Tierney et al. (1990) point out, the activities that teachers provide to prepare their students to read the text contribute to the students' comprehension, because these activities both activate students' prior knowledge about the topic and provide them a purpose to read. Then, the subjects in both groups were asked to tell orally everything they remembered about the text after reading it for fifteen minutes. One week

later, to test for the effect of time on subjects' retellings, the subjects in the two groups were asked to retell the same text in the same way. As discussed in the review of the literature, retelling is a direct way of testing students' comprehension of a text and it is recommended to be used as much as possible, because retelling indicates how students make use of their prior knowledge and how they organize what they recall.

4.2 Results

As mentioned in Chapter 3, the subjects of the two groups were first matched on their prior knowledge, using the Word Association technique.

After matching the subjects into two groups according to prior knowledge they had, the two groups were administered their treatments and asked to retell the text immediately after reading it. Table 4.1 shows the immediate retelling scores of the experimental and control groups. As can be seen from the table, the mean score of the experimental group subjects, 23.40, is higher than the mean score of the control group subjects, which is 18.80.

Then, a t-test was run to measure the difference between the mean scores of the experimental and control groups. The observed t-value was found to be 1.60 with a $p < .20$ which is not sufficient to reject the first null-hypothesis.

However, it should be noted that eight of the subjects whose prior knowledge had been activated through pre-reading activities remembered more text than the subjects with whom they were matched.

Table 4.1
Immediate Retelling Scores of Experimental and Control Groups in Percentages and T-Test Results

Subject	Experimental	Control
1	28	9
2	23	23
3	25	18
4	5	15
5	28	25
6	22	15
7	21	19
8	28	28
9	31	20
10	23	16
TOTALS	234	188
MEANS	23.40	18.80
SD	7.23	5.53
N	10	10

tobs=1.60 $p < .20$

Since subject 4 in the experimental group did not seem to be willing to participate in the study, he got a very low score from the immediate retelling which was 5 and a score of 12 for the Word Association. When subject 4 in both groups was eliminated from the t-test analysis the t-observed value was found to be 2.80 and the results were significant at .05 level. However, since there was no reliable explanation for eliminating these subjects from the study and since the number of the subjects participating in the study was already

limited, the analysis continued with these subjects.

Finally, the groups were asked to retell the text one week after reading it. Table 4.2 shows the delayed retelling scores of experimental and control groups. Data from subjects 1, 6, and 9 were not collected due to their absence. From the table, it can be seen that the experimental group got a higher mean score with 17.57 than the control group with a mean of 15.14.

Table 4.2
Delayed Retelling Scores of Experimental and Control
Groups in Percentages and T-Test Results

Subject	Experimental	Control
1	-	-
2	12	14
3	22	14
4	5	14
5	16	15
6	-	-
7	21	17
8	20	17
9	-	-
10	27	15
TOTALS	123	106
MEANS	17.57	15.14
SD	7.28	1.35
N	7	7

$t_{obs}=0.87$

In order to find out whether the difference between the mean scores of the experimental and control groups were significant or not, a t-test was run and the t-observed value was found to be 0.87 which was not found to be significant. Therefore, the second null-hypothesis of the study was accepted; that is, the subjects with a pre-reading

treatment did not do significantly better in the delayed retelling than the subjects without any activation of prior knowledge.

In order to determine whether the amount of subjects' prior knowledge had any relationship to the amount of their recall, the two were compared by using Pearson Product Moment Correlation (PPMC). As seen in Table 4.3, all the correlations between subjects' Word Association scores and their scores on the immediate and delayed retellings were found to be low and not significant ($p < .10$). However, the correlation between the subjects' Word Association and delayed retelling scores were higher for both groups. Therefore, from PPMC results, it can be concluded that the prior knowledge that subjects had before reading the passage had more effect over time.

Table 4.3
Correlation Between Word Association and Immediate Retelling (Imm-Retell) and Delayed Retelling (Del-Retell) Scores of Experimental and Control Groups

Experimental		Control	
Imm-Retell	Del-Retell	Imm-Retell	Del-Retell
0.21 $p < .10$	0.64 $p < .10$	0.38 $p < .10$	0.71 $p < .10$

Table 4.4
Word Association Scores (Word Ass.) and Retelling
(Imm-Retell/Del-Retell) Scores of Subjects in the
Experimental Group

Subject	Word Ass.	Imm-Retell	Del-Retell
1	4	28	-
2	9	23	12
3	10	25	22
4	12	5	5
5	16	28	16
6	17	22	-
7	18	21	21
8	22	28	20
9	25	31	-
10	25	23	27
TOTALS	158	234	123
MEANS	15.8	23.40	17.57
SD	7.05	7.23	7.28
N	10	10	7

Table 4.5
Word Association (Word Ass.) Scores and Retelling
(Imm-Retell/Del-Retell) Scores of Subjects in the
Control Group

Subject	Word Ass.	Imm-Retell	Del-Retell
1	4	9	-
2	6	23	14
3	9	18	14
4	10	15	14
5	16	25	15
6	18	15	-
7	18	19	17
8	23	28	17
9	25	20	-
10	25	16	15
TOTALS	154	188	106
MEANS	15.4	18.80	15.14
SD	7.78	5.53	1.35
N	10	10	7

In order to determine whether activating subjects' prior knowledge helped the low or high

prior knowledge subjects more, the immediate retelling scores of low prior knowledge subjects and high prior knowledge subjects for both experimental and control groups were analyzed. Subjects 1 to 5 were identified as having low prior knowledge and subjects 6 to 10 as having high prior knowledge. It was found that there was no difference in performance of low and high prior knowledge subjects on the immediate retelling, however, subjects with high prior knowledge were expected to get higher scores. Then, it can be concluded that activating subjects prior knowledge who did not know much about the topic benefited pre-reading activities more than the subjects who knew more about the topic. All the scores subjects got from the Word Association, Immediate retelling and Delayed retelling were shown in Table 4.4 for the experimental group and in Table 4.5 for the control group.

4.3 Discussion

Previous research findings have concluded that activating students' prior knowledge about a particular topic helps them to comprehend a reading passage. The results of this study do not support these findings for second language learners and thus, both null hypotheses were accepted. However, there was some indication that students whose prior knowledge was activated comprehended the passage

better than the students whose prior knowledge was not activated. When the mean scores of the both groups were taken into consideration, the mean scores of the experimental group subjects, whose prior knowledge had been activated through the Anticipation Guide, were found to be 23.40 for the immediate retelling and 17.57 for the delayed retelling. On the other hand, the subjects in the control group, who did not have any treatment, had a mean score of 18.80 on the immediate retelling and 15.14 on the delayed retelling. Both retelling results of the experimental group subjects were higher than the retelling results of the control group subjects.

In the second step of the analytical procedures, the Pearson Product Moment Correlation was used to correlate Word Association scores and immediate retelling and delayed retelling scores of the experimental and control groups. The amount of prior knowledge did not seem to make a difference on later recall. All the correlations were found to be low and not significant ($p < .10$). However, the correlation between control group subjects' Word Association scores and delayed retelling scores was found to be 0.71, higher than the others. It is not clear why this occurred only for the control group and the delayed recall.

In addition, further analysis of subjects with low and high prior knowledge indicated that the pre-reading activity seemed to be more helpful for the subjects who had low prior knowledge about the topic, although there were no significant differences.

CHAPTER V

CONCLUSIONS

5.1 Summary of the Study

Research findings on cognitive research have important implications for EFL/ESL reading educators and researchers. Successful reading in a foreign language is not only related to understanding the meaning of each word in the reading material, but also with the learners' existing prior knowledge about the material to be read. As Moorman and Blanton (1990) point out, "meaningful learning from text occurs when readers generate new understandings based on the relationship between prior knowledge stored in memory (schema) and new information presented in the text" (p. 175).

According to the literature, there is a relationship between activating the students' prior knowledge and increase in their comprehension of a text. Therefore the aim of this study was to examine this relationship and it was assumed that by activating subjects' prior knowledge with a pre-reading activity, namely the Anticipation Guide, higher scores would be obtained from subjects' retellings. It was also assumed that this activation of subjects' prior knowledge would be effective over time.

In order to test these two hypotheses (see Section 1.3) 20 subjects were chosen from two intermediate classes from Bilkent University School of English Language (BUSEL). They were given a pre-test which

measured the subjects' prior knowledge about the topic "Nomads". The Word Association technique was used and based on the scores, subjects were matched and placed into two groups (see Table 3.1). Then, a pre-reading activity, the Anticipation Guide, was assigned in the experimental group to activate subjects' prior knowledge. The subjects in the control group were not provided with any activity before they read the passage. Just after the subjects in both groups finished reading the passage in a given period of time they were asked to tell orally everything they remembered about the passage. Each subject was interviewed individually by the experimenters and the experimenters wrote down whatever the subjects told them. Finally, one week later, the same subjects retold the same passage in the same way. The scoring of the subjects' retellings was done according to a checklist which was prepared over the same reading passage by discarding the details and the minor points, leaving a 110-unit list of the passage. Subjects were given one point for each unit. Then, the total score of each subject's retelling was converted to percentages for statistical analyses. The two statistical procedures used in this study were the t-test, which was used to find out whether there was a significant difference between the experimental and control groups' retelling scores and the Pearson Product Moment Correlation (PPMC), which was used to correlate

subjects' prior knowledge (Word Association Scores) and their recall (retelling scores), both immediate and delayed.

5.2 Assessment of the Study

5.2.1 Conclusions

Activating prior knowledge, using an Anticipation Guide, does not seem to increase students' recall of text read, immediately or after one week. The results of the t-test for the immediate retelling and for the delayed retelling show that there was no significant difference between the experimental and control groups. The t-observed value for the immediate retelling was found to be 1.60 which was significant at the .20 level and the t-observed value was found to be 0.87 for the delayed retelling. These findings contradict the findings of past research on the effect of activating prior knowledge on reading comprehension. However, the differences in means between the groups are in the direction expected. The means for the immediate retelling were 23.40 for the experimental group and 18.80 for the control group. In the delayed retelling experimental group subjects got a mean of 17.57 and control group subjects got a mean of 15.14. However, since the number of the subjects in the study was small (10 in each group), the results must be interpreted with caution. As Harrison (1983) says in order to be able to make generalizations, about two hundred

subjects should be used in a study. In addition, the Pearson Product Moment Correlation results showed that there was no relationship between amount of prior knowledge and amount of recall. Further analysis of low and high prior knowledge subjects found that activating subjects prior knowledge who did not know much facilitated their comprehension more than the subjects who knew more about the topic.

5.2.2 Assessment of the Findings

These findings may be due to the limitations of the study. Since the study was conducted with a limited number of subjects, it is difficult to make generalizations. Therefore, it cannot be concluded by looking at the data obtained from only 20 subjects that activating subjects' prior knowledge about the topic does not help subjects remember the passage better and that pre-reading activities are not very beneficial to the students. This conclusion would contradict the findings of previous research done on larger populations over longer time periods. However, the results of the current study may reflect other factors that contribute to L2 reading comprehension. According to one of the latest studies conducted by Roller and Matambo (1992) on Zimbabwean students it was found that bilingual readers do not always use their background knowledge to comprehend the texts. The results of the study showed that bilingual readers

recalled more when reading and writing in their second language than they do when reading and writing in their first language. In addition, it was found that the use of context improved comprehension for some passages, but not all; that is, showing them pictures and activating their prior knowledge did not always help them in comprehending the passages. Therefore, it might be concluded that the results of the research on the effect of prior knowledge may not be necessarily true for all language learners. There might be other factors such as L1 educational background, cultural knowledge, etc.

Another reason for not finding significant results may be due to the nature of the tasks which the subjects were given. The retelling tasks (immediate and delayed) were new to the subjects, that is, students in Turkey generally are asked to answer comprehension questions written or orally after reading a passage in order to evaluate whether they have understood the passage or not. However, in this study, the subjects were told to tell everything they remembered about the passage they had read, which was an unfamiliar way of measuring comprehension for the EFL subjects in Turkey. The retelling procedure requires the ability to comprehend the information given in the passage, organize it and then recall it, which is not usually done in EFL classrooms. In addition, the retelling procedure requires an oral

ability which should also be taken into consideration. Therefore, giving subjects practise with retelling before the study was conducted and teaching them how to organize the information and then recall it might have been one solution for this limitation of the study.

It should also be noted here that although the study was organized in such a way that the experimenters would mark each unit as the subjects retold it by using a checklist, this method was changed during the retelling procedures and each experimenter wrote down whatever the subjects told them. It was thought that this method was more practical for two reasons. First, since there were 20 subjects in each group at the beginning of the study, it would be difficult for the experimenters to follow all 20 subjects in a few hours. Second, since the reading passage was three-pages long, it would also be difficult to locate quickly every unit as the subjects retold it without missing anything. However, tape-recording the subjects' retellings might have been a more reliable technique for collecting the data.

Finally, the study was conducted just after the students' examination week. This might have been the wrong time for collecting data because the students were tired from the examinations, so it might have been difficult for them to concentrate on reading such a long passage and retelling it. Choosing a shorter passage might have been a solution for this problem, it

would also have been easier to retell a shorter passage for the subjects. By doing this, the study could have been conducted with more subjects. In addition, the topic of the passage might not have been interesting for the subjects. "Nomads" was a general topic and it was assumed that most of the people would have prior knowledge, so would find it interesting. However, the situation might not have been as assumed.

5.3 Pedagogical Implications

In the EFL setting in Turkey, it is a well known fact that reading is one of the most important skills that the students are expected to acquire in order to be successful both in their educational and professional lives. Since it is such an important skill for the students, it is the reading teachers' duty to prepare them to learn and use the necessary strategies while reading.

As the review of the literature suggests, the prior knowledge that the reader brings to a passage is an important factor, because the reader can only comprehend new information if he can build a bridge between what he already knows and what is new. Therefore, it is important for the teachers to find out what their students know about the topic and develop their lesson plan accordingly. As Taglieber et al. (1988) say the assessment of students' prior knowledge assists the teacher in:

1. determining the prior knowledge a student possesses about a specific topic, as well as the manner in which this knowledge is organized;
2. becoming aware of the language a student uses to express knowledge about a given topic; and
3. making judgements about how much additional background information must be taught before the student can successfully read the text. (p. 470)

Therefore, after determining students' prior knowledge, the teacher can use pre-reading activities to activate that knowledge or to provide knowledge if the students lack it. Using an Anticipation Guide is a good way of both activating students' prior knowledge by making them react to several statements and giving them a purpose to read.

5.4 Suggestions for Further Research

Several suggestions for data collection can be made here. The most important factor for not finding significant differences between the subjects whose prior knowledge have been activated and the subjects whose prior knowledge have not been activated was the limited number of the subjects who participated in the study. Therefore, another study might be conducted with more subjects and different results might be found. In addition, instead of using retelling as a measure of comprehension, another technique might be used to measure students' comprehension of the text in a different study. Tape-recording the subjects' retellings or asking them to write down everything they

remember and then analyzing their written retellings might be a more reliable way of collecting data.

Other treatments can be tried to determine the effect of prior knowledge on students' comprehension. The Anticipation Guide technique which was used in this study as a pre-reading activity also includes a post-reading activity, but it was not included in the study. Applying the Anticipation Guide as a whole or choosing another technique to activate students' prior knowledge could be topics for further research. For example, showing students pictures or video cassettes or talking about the students' own experiences might be useful pre-reading activities as suggested in the literature. In addition, as mentioned before, another reading passage which is shorter or about something else might be used in another study. For example, two reading passages, one about the students' own culture and the other about a foreign culture might be chosen and the effect of cultural background knowledge might be examined.

Finally, looking at the effect of prior knowledge on other skills-- listening, speaking and writing --are suggested in this study. If prior knowledge affects reading comprehension, as the literature says, it should also affect listening comprehension. In addition, activating prior knowledge will be effective in students' speaking and writing since they require comprehension as well.

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APPENDIX A
READING PASSAGE

GYPSIES AND OTHER NOMADS

A long time ago, most people lived in groups that move around as the seasons changed. They did not have permanent homes. Because they did not live in one place. In order to have food to eat, they had to search for it. They also hunted for wild animals. When the seasons changed, the animals moved, looking for food. The people moved, too, to find food that grew in other places at different seasons. Their homes were temporary ones, like tents. These people had few belongings, only possessions that were easy to carry.

Nowadays there are still a few groups of people who do not have permanent homes. Some of these people consider themselves nomads. They are herders who move their animals to places where there is plenty of grass. Other people, farm workers, move because they work harvesting crops. However, another group, gypsies, moves around because of their traditions. These people are traders who want to live as their families have always lived. Besides gypsies, there are other people who travel around buying and selling goods.

Nomads are mobile as they take their animals and possessions from place to place. The animals eat grass there all summer. Then in the fall before

the weather gets cold and snow begins to fall, the herders move their animals down into warmer valleys and plains for the winter. Therefore, their way of life is determined by the seasons. In some mountain areas of the Middle East, the Far East, and Latin America, there are still groups of nomads who travel with their animals.

Another modern day group of people who move around are farm workers. These people work on farms, harvesting fruit, vegetables and grain. Because crops ripen at various times of the year, farm workers can gather in many different harvests in different places.

Gypsies are the third group of people who do not live in one place. Gypsies are found in many parts of the world. Although they speak the language of the country where they live, all gypsies share special traditions and attitudes and have a society and culture of their own. Most gypsies are traders, travelling from place to place buying and selling goods. In the past, gypsies were known as horse breeders and horse traders. They were also famous for fortune-telling and are still well-known for lively music. In contrast to other nomadic people, gypsies have adapted to modern society. Now they move from city to city in vans and limousines rather than in wagons and carts. They live in rented houses rather than in wagons and tents. They

work at jobs that are part of modern society. They have learned how to keep the good traditions and attitudes of an old way of life, but also they have learned how to use technology to live in a modern world.

Gypsies are not the only nomadic traders. There are traders who live in trailer houses, motor homes, campers, and vans and travel around the country selling and buying. Their goods include everything from hardware and antiques to handmade jewelry and paintings. Many of these people have retired from regular jobs, and now they make their living by travelling around buying and selling goods.

These people certainly do not consider themselves homeless. If a person asks an animal herder, a gypsy, a farm worker, or a trader where his or her "home" is, the person will probably receive a simple answer: "I have many--in different places."

APPENDIX B

CHECKLIST

GYPSIES AND OTHER NOMADS

A long time ago, / most people lived in groups / that move around / as the seasons changed. / They did not have permanent homes. / Because they did not live in one place. / In order to have food to eat, / they had to search for it. / They also hunted for wild animals. / When the seasons changed, / the animals moved, / looking for food./

The people moved, ~~too~~, / to find food / that grew in other places / at different seasons. / Their homes were temporary ones, / like tents. / These people had few belongings, / only possessions that were easy to carry./

Nowadays / there are still a few groups of people / who do not have permanent homes. / Some of these people consider themselves nomads. / They are herders / who move their animals to places/ where there is plenty of grass. / Other people, farm workers, move / because they work harvesting crops./ However, another group moves around / because of their traditions. / These people are traders / who want to live as their families have always lived./ Besides gypsies,/ there are other people who travel around / buying and selling goods. Nomads are mobile / as they take their animals / and possessions from place to place. / The animals eat

grass there / all summer. / Then in the fall/
 before the weather gets cold and snow begins to
 fall, / the herders move their animals down into
 warmer valleys/ and plains / for the winter. /
Therefore, / their way of life is determined by the
 seasons. / In some mountain areas of the Middle
 East,/ the Far East, and / Latin America, / there
 are still groups of nomads / who travel with their
 animals./

Another modern day group of people who move around
 are farm workers. / These people work on farms, /
 harvesting fruit, / vegetables and /grain. / Because
 crops ripen at various times of the year, / farm
 workers can gather in many different harvests./

Gypsies are the third group of people / who do not
 live in one place. / Gypsies are found in many
 parts of the world. / Although they speak the
 language of the country where they live, / all
 gypsies share special traditions and / attitudes
 and/ have a society and / culture of their own. /

Most gypsies are traders, /travelling from one place
 to place / buying and/ selling goods./ In the
 past, / gypsies were known as horse breeders / and
 horse traders. / They were also famous for fortune-
 telling / and are still well-known for lively
 music. / In contrast to other nomadic people, /
 gypsies have adopted to modern society. / Now they
 move from city to city in vans / and limousines /

rather than in wagons and carts. / They live in rented houses rather than in wagons / and tents. They work at jobs that are part of modern society. / They have learned how to keep the good traditions / and attitudes of an old way of life, / but also they have learned how to use technology / to live in a modern world./

Gypsies are not the only nomadic traders. / There are traders / who live in trailer houses, / motor homes, / campers, and /vans /and travel around the country selling and/ buying. / Their goods include everything from hardware and/ antiques /to handmade jewelry /and paintings. / Many of these people have retired from regular jobs, / and now they make their living by travelling around/ buying and selling./

These people certainly do not consider themselves homeless. / If a person asks an animal herder, / a gypsy, / a farm worker, or a trader / where his or her "home" is, / the person will probably receive a simple answer: / "I have many-/ in different places."

APPENDIX C

INSTRUCTIONS GIVEN IN THE EXPERIMENTAL GROUP

Below are five statements about nomads. Read each statement carefully and write your opinion about each one as "I agree", "I do not agree" or "I have no idea". Be prepared to defend your opinion as we discuss the statements.

- 1. Today, people's lives are determined by the seasons.
- 2. Farm workers no longer move around as the seasons change.
- 3. Gypsies have adopted to living in a modern world.
- 4. Nomads are herders who travel from place to place with their animals.
- 5. There are traders who still move around in order to buy and sell their goods.